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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,807	08/22/2000	Yumiko Kato	865.4491	9125

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EXAMINER

NGUYEN, THONG Q

ART UNIT PAPER NUMBER

2872

DATE MAILED: 12/14/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,807

Applicant(s)

KATO, YUMIKO

Examiner

Thong Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 20-38 and 60-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 39-59, 63 and 64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species (I), claims 2-19, 39-56, 58-59 and 63-64 in Paper No. 8, filed on 10/22/2001 is acknowledged. The traversal is on the ground(s) that 1) it is not mandatory for the Examiner to make an Election of Species Requirement in every possible situation; and 2) all of the claims can be searched by one Examiner without undue effort; and 3) Withdraw of election requirement should be made in the interest of prosecution quality and economy for both the office and applicants.

This is not found persuasive because of the following reasons:

First, Applicant has made a conclusion that "it is not mandatory for the Examiner to make a (an?) Election of Species Requirement in every possible situation" (Election (Paper No. 7, page 1)); however, applicant has failed to provide the reasons to support for his statement. In other words, it is unclear which situation is considered as a possible situation for an Election of Species Requirement in applicant's definition.

Second, the Species I and II as set forth in the Election requirement (Paper No. 6) clearly show the differences between two patentable species. Applicant is also invited to review the present specification for the structure of the prisms and their arrangements of the first to thirteen embodiments. In each of the first to eighth embodiments, applicant teaches the use of two prisms having surfaces facing to each other wherein one surface of one of the prism is a rotationally-asymmetric surface. That kind of structure is grouped as the Species I. However, in each of

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the ninth to thirteenth embodiments, applicant teaches the use of two prisms having surfaces facing to each other wherein there is not any surface is a rotationally-asymmetric surface, and the surfaces are arranged in an inclination to each other. That kind of structure is grouped as the Species II.

Third, it is clearly that the claims are directed to different structures and arrangements. Different structures and arrangements of the components will give a burden to the Examiner in the process of search and examination. Applicant should further note MPEP 808.01(a), "the reasons for insisting upon election of one species,... it is not necessary to show a separate status in the art or separate classification".

Fourth, in order for the applicant to present a cogent argument, (s)he must demonstrate that the different species are obvious variants and so clearly stated on the record.

Fifth, "in the interest of prosecution quality and economy for both the office and applicants" is not a reason to negate a proper election/restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

As a result of applicant's election, claims 2-19, 39-56 and 58-59 directed to the elected Species I and the generic claims 1 and 57 (see Note below) are examined in this Office action, and claims 20-38 and 60-62 have been withdrawn from further consideration as being directed to non-elected Species.

Note: Claims 20 and 60 direct to the use of two prisms wherein the interval between the two surfaces facing to each other varies monotonically, such a

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feature was grouped into the species II. The Examiner sincerely apologizes for the overlook.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings contain 24 sheets of figures 1 -32 filed by applicant have been received by the Office.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The disclosure is objected to because the Summary of the Invention is too long (about 22 pages) and contains a numerous details of the inventive device. The present Summary is not considered as the one comply with the regulations set forth in 37 CFR 1.73 and MPEP 608.01(d).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 19 and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 19 is indefinite because it is unclear how a reflecting member is made from a transparent body as recited on last two lines of the claim.

b) Claim 56 is rejected for the same reason as set forth in element a) above.

Double Patenting

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claim 42/41/40/39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 5/4/3/2/1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

10. Claim 44/43/40/39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 7/6/3/2/1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in

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wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

11. Claim 46/45/40/39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 9/8/3/2/1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

12. Claim 48/47/40/39 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 11/10/3/2/1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-5, 12-19, 39-42, 49-59 and 63-64, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese reference No. 10-206933 (submitted by applicant) in view of Takahashi (U.S. Patent No. 5,886,824).

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The Japanese reference '933 discloses a viewfinder having an objective lens system (1) for forming an image of an object; an image erecting prism system having two prism elements (2, 3) for inverting the image formed by the objective lens system, and an eyepiece lens system (6) for observing the non-inverted image of the object. There is a reflecting element (5) disposed between the exit surface of the image erecting prism system and the eyepiece lens system for guiding light from the prism system to the eyepiece lens system. The image erecting prism system comprises a first prism element (2) having only a function of transmitting a light ray, and a second prism element (3) having the following structure: an entrance surface disposed adjacent to the exit surface of the first prism element for allowing a light ray passing therethrough, a total reflecting surface for reflecting the light ray back to the entrance surface, and a reflecting part disposed on the entrance surface for reflecting light ray from the total reflecting surface, and an exit surface which allows the light ray reflected from the reflecting part passing therethrough. As such, the viewfinder provided by the mentioned Japanese reference meets all of the limitations as recited in the claims except the feature that at least one surface of the first and second prism elements is a rotationally-asymmetrical surface.

However, the use of a prism element or a set of prism elements disposed adjacent to each other wherein at least one surface of the prism elements is a rotationally-asymmetric surface for the purpose of correcting the image aberrations is clearly suggested to one skilled in the art as can be seen in the

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optical device provided by Takahashi. In particular, at column 33 and in figures 16-17, Takahashi discloses a viewfinder having an objective lens system, an image erecting prism system, and an eyepiece system wherein the image erecting prism system comprises an optical apparatus having at least one prism element whose at least one surface is a rotationally-asymmetrical surface. The prism element (DS) as described at columns 19-20 and 23-24 comprises a first prism element (4) having at least one rotationally-asymmetrical surface (see columns 23-24 and the second prism element (5) having at least one rotationally-asymmetrical surface (see column 20). While, Takahashi does not clearly suggest the use of the rotationally-asymmetrical surface in the image erecting prism system, however, it is within the level of one skilled in the art to utilize the teaching concerning about the use of rotationally-asymmetrical surface in the image erecting prism system for the same purpose, i.e., correcting the image aberrations caused in the gap defined between two surfaces of the two prism elements facing to each other. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the viewfinder provided in the Japanese reference '933 by using at least one surface of the prism elements as a rotationally-asymmetrical surface as suggested by Takahashi for the purpose of correcting the image aberrations.

15. Claims 1-3, 10-19, 39-40, 47-59 and 63-64, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese reference No. 11-211998 in view of Takahashi (U.S. Patent No. 5,886,824).

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The Japanese reference '998 discloses a viewfinder having an objective lens system (TA) for forming an image of an object; an image erecting prism system having two prism elements (PD, P2) for inverting the image formed by the objective lens system, and an eyepiece lens system (SE) for observing the non-inverted image of the object. There is a reflecting element (M1 or P1) disposed between the objective lens system and the image erecting prism system for guiding light from the objective lens system to the image erecting prism system. The image erecting prism system comprises a first prism element (P2) having only a function of transmitting a light ray, and a second prism element (PD) having the following structure: an entrance surface disposed after the reflecting element (M1 or P1) for allowing a light ray passing therethrough, a total reflecting surface for reflecting the light ray, a reflecting surface for reflecting light ray reflected from the total reflecting surface back to the total reflecting surface, and an exit surface formed on one part of the total reflecting surface for allowing the light ray reflected from the reflecting surface passing therethrough. See figures 11, 13 and 14, for example. As such, the viewfinder provided by the mentioned Japanese reference meets all of the limitations as recited in the claims except the feature that at least one surface of the first and second prism elements is a rotationally-asymmetrical surface.

However, the use of a prism element or a set of prism elements disposed adjacent to each other wherein at least one surface of the prism elements is a rotationally-asymmetric surface for the purpose of correcting the image

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aberrations is clearly suggested to one skilled in the art as can be seen in the optical device provided by Takahashi. In particular, at column 33 and in figures 16-17, Takahashi discloses a viewfinder having an objective lens system, an image erecting prism system, and an eyepiece system wherein the image erecting prism system comprises an optical apparatus having at least one prism element whose at least one surface is a rotationally-asymmetrical surface. The prism element (DS) as described at columns 19-20 and 23-24 comprises a first prism element (4) having at least one rotationally-asymmetrical surface (see columns 23-24 and the second prism element (5) having at least one rotationally-asymmetrical surface (see column 20). While, Takahashi does not clearly suggest the use of the rotationally-asymmetrical surface in the image erecting prism system, however, it is within the level of one skilled in the art to utilize the teaching concerning about the use of rotationally-asymmetrical surface in the image erecting prism system for the same purpose, i.e., correcting the image aberrations caused in the gap defined between two surfaces of the two prism elements facing to each other. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the viewfinder provided in the Japanese reference '998 by using at least one surface of the prism elements as a rotationally-asymmetrical surface as suggested by Takahashi for the purpose of correcting the image aberrations.

16. Claims 6-9, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese reference No. 10-206933 (submitted by applicant) in

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view of Takahashi (U.S. Patent No. 5,886,824) as applied to claims 39-40 above with or without the Japanese reference No. 11-211998.

The combined product as provided by the Japanese reference '933 and Takahashi as described in the paragraph 14) above does not disclose the arrangement of the prism elements constituting the image erecting system, and the reflecting element as recited in each of claims 43 and 45. However, such an arrangement of the prism elements and the reflecting element as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for that conclusion is found in the present specification in which applicant has disclosed a plurality of embodiments wherein each embodiment directs to different arrangement of the prism elements and the reflecting element. Furthermore, the difference in the arrangement of the prism elements and the reflecting elements is not critical because the plurality of arrangement are indeed claimed as can be seen in the present claims 41 and 47. It is also noted that an arrangement of the reflecting element between an objective lens system and an image erecting prism system wherein the first prism element in the order from a light ray coming from an object has two transmitting surfaces, a total reflecting surfaces and a reflecting surface, and the second prism element has only a function of transmitting a light ray is disclosed in the art as can be seen in the viewfinder described in the Japanese reference '988. See figures 11, 13 and 14, for example. Thus, absent any showing of criticality, it would have been obvious to one skilled in the art at the time the invention was made to rearranging the

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positions of the prism elements and the reflecting element in any suitable order for the purpose of forming an intermediate image of an object by an objective lens system, erecting the intermediate image to obtain a non-inverting image, and observing the non-inverting image by an eyepiece lens system. See also *In re Japikse*, 86 USPQ 70; *In re Gazda*, 104 USPQ 400.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references are cited as of interest in that each discloses a viewfinder having an objective lens system, an image erecting prism system, and an eyepiece lens system.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is 703 308 4814. The examiner can normally be reached on M-F.

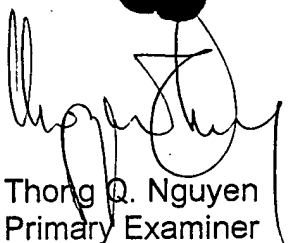
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703 308 1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 7724 for regular communications and 703 308 7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

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Thong Q. Nguyen
Primary Examiner
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December 11, 2001